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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Randall A. Boudouris

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VIDAS, ARRETT & STEINKRAUS, P.A.
6109 BLUE CIRCLE DRIVE
SUITE 2000
MINNETONKA, MN 55343-9185

EXAMINER

PIAZZA CORCORAN, GLADYS JOSEFINA

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/990,109

Applicant(s)

BOUDOURIS ET AL.

Examiner

Gladys J Piazza Corcoran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19-42, 45-60 and 71-76 is/are pending in the application.
- 4a) Of the above claim(s) 42 and 45-59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-41, 60 and 71-76 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

FINAL ACTION

Election/Restrictions

1. Applicant's election of Group I in the Paper filed December 11, 2003 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 42, 46-59 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the Paper filed December 11, 2003.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claim 71 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 71 recites selecting the thermoplastic polymer from a group including "ethylene n-butyl (meth) acrylate." While the Specification on page 6 discloses "ethylene n-butyl acrylate", there appears to be no support for "ethylene n-butyl (meth) acrylate." It is suggested to either point to where in

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the Specification such is disclosed or amend the claim to recite --ethylene n-butyl acrylate--.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 75 and 76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 75 is unclear by reciting "forming said printable substrate layer into a plurality of magnetic sheet assemblies." It is unclear how the printable substrate layer is formed into a plurality of magnetic sheet assemblies without the magnetic layer. It appears that the Applicant intends to recite that the printable substrate layer after the magnetic layer is applied thereto is then formed into a plurality of magnetic sheet assemblies. One suggestion is to amend the claim to recite --forming the printable substrate layer with the applied magnetic layer into a plurality of magnetic sheet assemblies--.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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9. Claims 1-4, 6-9, 14-16, 22-26, 29-31, 38-40, 60, 74 are rejected under 35 U.S.C. 102(b) as being anticipated by Silverchotz et al. (US Patent No. 5,869,148) as set forth in paragraph 19 of the previous Office Action filed October 3, 2003.

Silverchotz discloses a process of forming a magnetic assembly by providing a magnetic composition (601) at an elevated temperature comprising at least one magnetic material and at least one thermoplastic polymer (column 2, lines 19-27; using a hot melt polymer; column 3, line 22), and directly applying the magnetic layer at an elevated temperature when it is pliable to a printable substrate layer (web 200) (the hot melt composition is coated onto the substrate layer).

As to claims 1, 60, Silverchotz discloses the composition comprising 70% magnetic material and 30% polymer (column 3, lines 25-30); and that the polymer is selected from a group consisting of a polyolefin, polyester, polyamide, or polyurethane (column 3, lines 53-58). As to claim 2, the magnetic layer is applied in thickness and width dimensions in the final form. As to claim 3, the magnetic layer is also affixed in the length dimension in final form. As to claim 4, the assembly is subjected to a strong magnetic field sufficient to result in a permanent magnetic effect in the assembly (column 5, lines 50-68). As to claim 6, the assembly is at ambient temperature after the process is completed. As to claim 7, the magnetizing step occurs after the applying step. As to claim 8, the printable substrate is printed (column 2, lines 53-62). As to claim 9, the assembly is formed in a roll form on a web. As to claim 14, Silverchotz discloses the claimed coating types (column 3, lines 59-61). As to claims 15 and 60, Silverchotz discloses extruding (column 3, lines 61-62). As to claim 16, the magnetic

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composition is a ferrite. As to claims 22-24, the thickness of the magnetic layer is disclosed (column 7, lines 10-15). As to claim 25, the magnetic composition is applied in the form of at least one ribbon. As to claim 26, the ribbon is pressed onto the substrate (in figure 5 with the rollers and in figure 4 when the sheet is folded over). As to claim 29, the ribbon is discontinuous with the printable substrate, see figure 4 for example. As to claim 30, the printable layer are the materials as claimed (column 2, lines 60-65). As to claim 31, Silverchotz discloses treating the printable layer (column 3, lines 1-8). As to claim 38, Silverchotz discloses the claimed articles (column 7, line 49 to column 8, line 5). As to claim 39, the magnetic layer is continuous with the printable layer (see figure 7). As to claim 40, the magnetic layer is discontinuous with the printable layer (see figure 4). As to claim 74, Silverchotz discloses the composition comprising 70% magnetic material and 30% polymer (column 3, lines 25-30).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 1-4, 6-17, 19-26, 29-31, 38-40, 60, 71-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverchotz et al. (US Patent No. 5,869,148) as applied to claims 1, 61 above, and optionally further in view of Sawa (US Patent No. 4,022,701) as set forth in paragraphs 22 and 23 in the prior Office Action filed October 3, 2003.

It is noted that paragraphs 22 and 23 of the previous Office Action have been combined to simplify the rejections.

As to claims 1-4, 6-9, 14-16, 22-26, 29-31, 38-40, 60, these are rejected as discussed above. The reference Silverchotz discloses the thermoplastic binder amount can be at 30% and that the thermoplastic polymer binder may be any flexible polymer or similar material including some of the polymers claimed. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide known percentages of polymer material for magnetic compositions and to provide well known thermoplastic polymers for the binder, only the expected results would be attained. Additionally, it is also known in the art when forming mixtures of magnetic compositions and polymer binders to provide thermoplastic amounts in magnetic compositions as little as 4% as exemplified in Sawa (column 4, lines 5-15) and that typical thermoplastic compositions for mixing with magnetic particles in magnetic compositions include polymers as claimed (for example column 1, lines 10-15; column 4, lines 27-34). It would have been

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obvious to one of ordinary skill in the art at the time of the invention to provide the magnetic material in Silverchotz with known percentages and compositions of thermoplastic polymers as is considered well known in the art and further exemplified by Sawa, only the expected results would be attained. As to claims 16, 17, Sawa discloses this conventional formula for magnetic material. As to claims 19, 20, the selection of such well known and available thermoplastic materials for a binder in a magnetic layer is considered conventional and obvious to one of ordinary skill in the art, furthermore, Sawa discloses such compositions. As to claim 21, this is a conventional particle size for magnetic material in addition Sawa discloses such (column 2, line 43). As to claim 71, Sawa discloses providing ethylene vinyl acetate, ethylene ethyl acrylate, copolymers of ethylene and an alphaolefin, polypropylene homopolymers as some of the examples of known polymers for forming magnetic compositions (column 4, lines 27-34). Furthermore, it would have been well within the purview of one of ordinary skill in the art at the time of the invention to use well known thermoplastic polymers for the binder composition, only the expected results would be attained. As to claims 72, 73, Sawa discloses the claimed percentages of magnetic material and thermoplastic binder. Further as to claim 73, Silverchotz discloses providing 70% magnetic material and 30% thermoplastic material and Sawa discloses from 80-97% magnetic material and the rest thermoplastic material. It would have been well within the purview of one of ordinary skill in the art to provide the range of 75% to 80% magnetic material in view of the percentages disclosed by the references, only the expected results would be attained.

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As to claim 74, the references Silverchotz and Sawa disclose the percentages as claimed.

As to claim 10, Silverchotz discloses forming the sheet in a roll, however it is considered well known in the art to alternatively form individual sheets, only the expected results would be attained. As to claims 11, 12, 75 and 76, it is considered well known in the art to stack manufactured cards to form a stacked pad and to apply adhesive to bind or shrink wrap around the stacks for distribution. It is noted that the Specification, page 19 describes this process as being known in the art. As to claim 13, it is well within the purview of one of ordinary skill in the art to select the appropriate temperature of application which is only dependent upon the thermoplastic binder selected, the thickness of the materials and the other selected materials. As to claim 16, the claimed formula is considered to be a conventional formula for magnetic materials. As to claims 19, 20, although Silverchotz does not specifically disclose using a polyalphaolefin, such thermoplastic binders are considered well known and one of ordinary skill in the art would readily recognize using such compositions, only the expected results would be attained, especially as evidenced by Sawa. It is noted that applicant admits in the Specification on page 7 that it is common for the terms polyolefin and polyalphaolefin to be used interchangeably. As to claims 22-24, it would have been well within the purview of one of ordinary skill in the art to select the appropriate thickness as claimed, such a thickness is considered within the conventional range and is only dependent upon the final product desired. As to claim 27, it is considered conventional to press extruded layers to substrates with a chill roll.

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Since Applicant has not traversed the well known statements, these are considered to be admitted prior art (see MPEP §1244.03).

13. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverchotz et al. (US Patent No. 5,869,148) and optionally Sawa (US Patent No. 4,022,701) as applied to claim 1 above, and further in view of Rippingale et al. (US Patent No. 5,114,517) as set forth in paragraph 24 of the previous Office Action filed October 3, 2003.

Silverchotz discloses subjecting the extruded layer to a magnetic field, but does not disclose if this is done while the extruded layer is still at an elevated temperature. Rippingale discloses subjecting an extruded magnetic layer to a magnetic field in order to provide a magnetic effect in the assembly (column 3, lines 10-28). The magnetic assembly is subjected to a magnetic field while the magnetic composition is at an elevated temperature in order to allow the proper alignment of the magnetic particles while the material is still soft (column 3, line 20). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of forming a magnetic assembly as shown by Silverchotz and optionally Sawa by subjecting the assembly to a magnetic field while the extruded layer is at an elevated temperature in order to provide a magnetic effect in the assembly while the magnetic particles can still be aligned as shown by Rippingale.

14. Claims 28, 39, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverchotz et al. (US Patent No. 5,869,148) and optionally Sawa (US Patent No. 4,022,701) as applied to claim 1 above, and further in view of Martin (US Patent No.

5,458,282) as set forth in paragraph 25 of the previous Office Action filed October 3, 2003.

It is unclear if Silverchotz discloses the magnetic layer is of the same width as the printable layer. However, Silverchotz discloses that the method can be used to produce a variety of products (column 7, line 49 to column 8, line 11). Furthermore, it is known to provide these products with a magnetized layer that has the same width as the printable layer. For example, Martin discloses such a product. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of applying a magnetic layer to a printable substrate as shown by Silverchotz and optionally Sawa by providing the magnetic layer with the same width as the printable substrate as is known in the art to form particular products similar to those disclosed by Silverchotz and as exemplified by Martin, only the expected results would be attained.

15. Claims 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverchotz et al. (US Patent No. 5,869,148) and optionally Sawa (US Patent No. 4,022,701) as applied to claim 1 above, and further in view of Schramer et al. (US Patent No. 5,019,436) as set forth in paragraph 26 of the previous Office Action filed October 3, 2003.

Schramer discloses an example of a well known advertising concept of temporarily adhering coupons/marketing articles to a release layer that is adhesively attached to a product article, such as packages, containers, etc. to allow removal of the marketing article from the product article. It would have been obvious to one of ordinary

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skill in the art at the time of the invention to provide the method of forming a magnetic assembly as shown by Silverchotz and optionally Sawa by joining the assembly to a release liner that is adhered to an article in order to provide a removable magnetic assembly to products as shown by Schramer. As to claim 36, it is well known to provide an over-laminate to printed substrates, for example see Silverchotz (column 3, lines 1-8).

16. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverchotz et al. (US Patent No. 5,869,148) and optionally Sawa (US Patent No. 4,022,701) and Schramer et al. (US Patent No. 5,019,436) as applied to claim 32 above, and further in view of Martin '624 (5,924,624), Fosbenner et al. (5,949,050), and/or Mack (US Patent No. 4,621,837) as set forth in paragraph 27 of the previous Office Action filed October 3, 2003.

It is well known in the art to perforate an overlamine in the same dimensions as an underlying member in order to allow the overlamine to provide protection to the underlying member until a consumer tears the overlamine at the perforations in order to use the underlying member. Such perforations and assemblies are exemplified by Martin '624, Fosbenner, and/or Mack. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of forming an assembly as shown by Silverchotz, Sawa, and Schramer by providing perforations in an overlamine in order to allow access by a user to the underlying assembly as is well known in the art and exemplified by Martin '624, Fosbenner, and/or Mack.

Response to Arguments

17. Applicant's arguments filed December 11, 2003 have been fully considered but they are not persuasive.

Applicant argues on page 12 that Silverschotz does not specifically teach any hot melt polymers which can be used in the process described and that Silverschotz only describes a wax as the hot melt binder which has different physical properties than a polymer. Applicant also argues on page 13 that Silverschotz does not specifically disclose hot-melt polymers as recited in amended claims 1 and 60, that Silverschotz appears to equate the hot-melt polymer with wax and no further direction as to any particular hot-melt binder. It is noted that the claims do not specifically recite "hot-melt" polymers, but instead applying a magnetic composition at an elevated temperature. Silverschotz discloses the magnetic materials are combined with magnetizable powder with a polymer in a variety of forms including a hot melt polymer. While Silverschotz discloses the magnetizable powder may also be combined with a wax, this is an alternative to the hot melt polymer embodiment (column 3, lines 14-27). Furthermore, Silverschotz discloses that the polymer may be any flexible polymer or similar materials including some of the polymers claimed (column 3, lines 53-58).

Applicant argues on page 14 that Sawa discloses a composition for molded magnets and not for printing applications, that the compositions in Sawa do not include wax, that the examples at most have 12% polymer with the remainder ferrite powder. Sawa is directed to a method of forming magnetic compositions that are highly magnetic, yet still able to have appropriate fluidity and viscosity for forming (not only

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injection molding but also rolling or extrusion; column 2, lines 65-68). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of forming the printed materials with a magnetic composition as shown by Silverscholtz by providing a greater percentage of magnetic composition and a lesser percentage of thermoplastic in order to increase the magnetic strength of the layer without decreasing the viscosity of the layer for forming and to use conventional thermoplastic polymers for the binder as exemplified by Sawa, only the expected results would be attained.

Applicants argue on page 14-15 that using the known thermoplastic materials would only be true when forming by molding and calendaring and then later adhered to a substrate with an adhesive layer and not an in-line process. Silverscholtz discloses directly applying a magnetic composition to a substrate layer where the composition is of magnetic material and a hot-melt polymer binder. Silverscholtz further discloses that the binder may be any flexible polymer or similar materials and then lists specific polymers including some of those claimed by Applicant. It would have been well within the purview of one of ordinary skill in the art to select conventionally known thermoplastic materials, in particular those that are known to be used to form magnetic layers, as the hot-melt binder in Silverscholtz. One of ordinary skill in the art would look to known thermoplastic materials for hot-melts in particular for forming magnetic layers since Silverscholtz discloses using "any flexible polymer or similar materials. Again, only the expected results would be attained.

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18. Applicant's arguments on pages 18-23 of the Remarks filed on December 11, 2003, with respect to the rejections based on Johnson or Martin in view of Breen have been fully considered and are persuasive. Therefore the rejections in paragraphs 29-32 of the previous Office Action filed October 3, 2003 have been withdrawn.

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gladys J Piazza Corcoran whose telephone number is (571) 272-1214. The examiner can normally be reached on M-F 8am-5:30pm (alternate Fridays off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gladys JP Corcoran
Examiner
Art Unit 1733

GJPC